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(30) Priority: **22.05.1998 JP 14148798**

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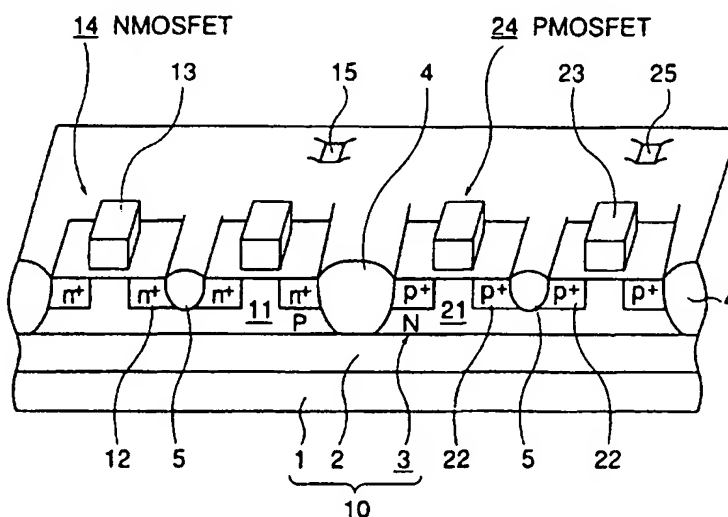
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(54) **SOI semiconductor device and method for manufacturing the same**

(57) A SOI semiconductor device comprises: a SOI substrate in which a buried dielectric film and a surface semiconductor layer are laminated; at least one well formed in the surface semiconductor layer; and at least one transistor which is formed in the well and has a channel region and source/drain regions in the surface semiconductor layer, wherein the well is completely iso-

lated in the surface semiconductor layer and has a well-contact for applying a bias voltage to the well, the transistor is isolated by a device isolation film formed in a surface of the surface semiconductor layer, the channel region is partially depleted, and the surface semiconductor layer under the source/drain regions is fully depleted.

**Fig. 1**



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# EUROPEAN SEARCH REPORT

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EP 99 30 3815

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Place of search BERLIN		Date of completion of the search 17 April 2000	Examiner Juhl, A
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>I : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

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# EUROPEAN SEARCH REPORT

Application Number  
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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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